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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/537,772	06/06/2005	Armin Grobenstieig	32016-218521 RK	4861
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VENABLE LLP P.O. BOX 34385 WASHINGTON, DC 20043-9998				
EXAMINER				
SMITH, MATTHEW J				
ART UNIT		PAPER NUMBER		
3635				
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09/11/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/537,772

**Applicant(s)**

GROBENSTIEG ET AL.

**Examiner**

Matthew J. Smith

**Art Unit**

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date Jan05
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5 and 7-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knell (4428173) in view of Tiffin et al. (4016688).

Knell discloses a welded profile comprising upper flange 22 and lower flange 24, sidewalls 26, 28; the sidewalls provided with upper and lower end regions; and the sidewalls provided with positioning locations 143 for the cylinder attachment points.

This reference does not disclose end regions with a reinforced profile which form the corner regions of the upper flange and the lower flange arranged between the end regions, sidewalls formed with separate metal sheets connected by welding with a thinner cross section, the end regions provided at least in part with cross-section reducing areas, the cross-section reducing areas face the respective sidewall, the respective cross-section reducing area converges in the center to flow into the inside and outside contour of the associated side wall, connection elements welded in the region of the exposed profile ends, embodied with a hollow-box design, the cross section of the connection element adapted to the respective end cross section of the box, the lower flange positioned between the end regions, so as to be essentially flush with the respective end regions, or the respective cross-section reducing area ends flush with the outside contour of the associated sidewall.

Tiffin et al. present, in Fig. 2, a boom having end regions 28-31 with a reinforced profile which form the corner regions of the upper flange 32 and the lower flange 33 arranged between the end regions; sidewalls formed with separate metal sheets 41 connected by welding with a thinner cross section; the end regions with cross-section reducing areas, at 36; the cross-section reducing areas face the respective sidewall; the respective cross-section reducing area converges in the center to flow into the inside and outside contour of the associated side wall; connection elements welded on in the region of the exposed profile ends, embodied with a hollow-box design; the connection cross section adapted to the respective box end cross section; the lower flange positioned between the end regions, so as to be essentially flush with the respective end regions; and the respective cross-section reducing area ends flush with the outside contour of the associated sidewall.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the Tiffin et al. design in the Knell boom in order to increase stiffness (Tiffin et al., col. 1, line 60).

Knell also discloses a method of making a profile with a contour designed to form integrated regions for the cylinder attachment points.

Tiffin et al. also present a method for making a welded profile by welding a lower flange 33 and an upper flange 32 to sidewalls 41 connected to end regions 28-31; the lower flange inserted between the associated end regions and welded; the upper flange is inserted between the associated end regions and welded; the sidewalls and the associated end regions shaped to match the contour; the end regions, with higher

Art Unit: 3635

reinforcement than the sidewalls, provided with cross-section reducing areas in the sidewall region and connected in the cross-section reducing area by welding to the respective sidewall

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to assemble the Knell boom incorporating the end regions of Tiffin et al. in order to increase stiffness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knell in view of Tiffin et al. as applied to claim 1 above, and further in view of Vaerk et al. (4337601).

The combination discloses the apparatus substantially as claimed but not the cross-section reducing area ends flush with the inside contour of the associated sidewall

Vaerk et al. show the respective cross-section reducing area ends 56 substantially flush with the inside contour of the associated sidewall 52.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have the inside contour in a box-shape, as substantially shown by Vaerk et al., since it is well known and no new or unexpected result would occur.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Landolt et al. (4257201) illustrate thicker end regions 30-33.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Smith whose telephone number is (571) 272-7034. The examiner can normally be reached on T-Th, 8-3.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard E. Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3635

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot, Jr./  
Supervisory Patent Examiner, Art Unit 3635

Richard E. Chilcot  
Supervisory Patent Examiner  
Art Unit 3635

MJS /M. J. S./  
Examiner, Art Unit 3635  
10 July 2008